

ABSTRACT

A multi-output DC-DC converter comprising a plurality of converters configured so that an inductor 2 and a main switch 31 are used in common, wherein a first output voltage  $V_{o1}$  is output from a circuit comprising a diode 41 and a first output capacitor 51, and a second output voltage  $V_{o2}$  is output from a circuit comprising an auxiliary switch 32, a diode 42 and a second output capacitor 52. The control circuit 80 of the multi-output DC-DC converter has an output detection circuit 81, an oscillation circuit 82, a PWM circuit 83, a frequency divider circuit 84 and a drive circuit 85, and controls a plurality of outputs at high efficiency and reliability.